

ABSTRACT

An ultrasonic probe 10' is formed by arranging a plurality of transducers 26a to 26m for converting drive signals into ultrasonic waves to transmit the waves to an object to be inspected, and receiving ultrasonic waves generated from the object to convert the waves into electrical signals. Each of the transducers 26a to 26m has a plurality of oscillation elements 34-1 to 34-30, and each of the oscillation elements 34-1 to 34-30 has a characteristic in which the electromechanical coupling coefficient changes in accordance with the strength of the direct-current bias applied by being superposed on the drive signals. Electrodes 35, 36, and 37 of each of the oscillation elements 34-1 to 34-30 are connected to terminals 49-1 and 49-2 to which the drive signals are applied.